

AMENDMENTS TO THE CLAIMS

What is claimed is:

Claim 1. (Currently amended): A process for transferring information from an information-bearing multilayer structure to a substrate which comprises

- a) providing an information-bearing multilayer structure comprising
 - i) a carrier layer which may or may not be peelable away from the structure,
 - ii) information desired to be transferred to a substrate, and
 - iii) a layer comprising a solid, previously unirradiated, radiation-curable resin,
- b) providing a substrate having an information-receiving surface to which it is desired to transfer said information,
- c) contacting said information-receiving surface of said substrate with said layer comprising said solid, previously unirradiated, radiation-curable resin under conditions of temperature and pressure sufficient to transfer said information from said information-bearing multilayer structure to said information-receiving surface, and
- d) subjecting the previously unirradiated, radiation-curable resin to sufficient radiation with or without a photoinitiator to effect a cure thereof and thereby cause said information to be bonded to said information-receiving surface.

Claim 2. (Original): The process of claim 1 wherein said radiation is ultraviolet radiation or electron beam radiation.

Claim 3. (Original): The process of claim 2 wherein said radiation-curable resin comprises epoxy group functionality.

Claim 4. (Original): The process of claim 2 wherein said radiation-curable resin comprises vinyl group functionality.

Claim 5. (Original): The process of claim 3 wherein the structure comprises a release coat between the carrier and the information to be transferred.

Claim 6. (Original): The process of claim 3 wherein the structure additionally comprises a clear coat attached to said carrier layer.

Claim 7. (Original): The process of claim 5 wherein the structure additionally comprises a clear coat between said release coat and said information to be transferred.

Claim 8. (Original): The process of claim 7 wherein said information to be transferred is either attached to said clear coat or is part of said clear coat.

Claim 9. (Original): The process of claim 3 wherein the carrier layer is not peelable away from the information to be transferred after step d) is performed.

Claim 10. (Original): The process of claim 3 wherein the carrier layer is polyester material.

Claim 11. (Original): The process of claim 10 wherein the polyester material is polyethylene terephthalate.

Claim 12. (Original): The process of claim 3 wherein the conditions of contacting in step c) to transfer said information include a temperature of between 100°F and 400°F.

Claim 13. (Original): The process of claim 12 wherein the substrate is selected from the group consisting of polyvinyl chloride, polyesters, and paper products.

Claim 14. (Original): The process of claim 13 wherein the substrate is currency paper.

Claim 15. (Original): The process of claim 1 wherein the curing in step d) is effected in the presence of photoinitiator for the curing of said resin employed.

Claim 16. (Original): The process of claim 1 wherein said solid, radiation-curable resin has a softening point in the range of from 100°F to 400°F.

Claim 17. (Original): The process of claim 1 wherein the information to be transferred comprises material selected from the group consisting of holographic images, diffractive gratings, high refractive index layers, solid, radiation-curable resin layers, clear coats, adhesive layers, decorative elements, metallic particles, metal surfaces, vacuum deposited metal layers, printed text, colors, lettering, pictures, and scenes.

Claim 18. (Original): The process of claim 1 wherein said information to be transferred comprises said layer comprising a solid, radiation-curable resin.

Claim 19. (Original): The process of claim 18 wherein said radiation is ultraviolet radiation or electron beam radiation.

Claim 20. (Original): The process of claim 18 wherein said radiation-curable resin comprises epoxy group functionality.

Claim 21. (Original): The process of claim 18 wherein said radiation-curable resin comprises vinyl group functionality.

Claim 22. (Original): The process of claim 20 wherein the conditions of contacting in step c) to transfer said information include a temperature of between 100° and 400° F.

Claim 23. (Original): The process of claim 20 which includes the additional step of providing, prior to performing the curing step d), textual material on said solid, radiation-curable resin layer at a location where the textual material will contact said substrate when step c) is performed.

Claim 24. (Original): The process of claim 20 wherein the carrier layer is polyester material.

Claim 25. (Currently amended) : The process of claim [[20]] 24 wherein the polyester material is polyethylene terephthalate.

Claim 26. (Original): The process of claim 20 wherein the carrier is peelable away from the solid, radiation-curable resin.

CLAIMS 27-53 (CANCELLED)

54. (New) The process of claim 3 wherein the carrier layer is peelable away from the information to be transferred after said solid, radiation-curable resin has been radiation-cured.

55. (New) The process according to claim 4 wherein the carrier layer is not peelable away from the information to be transferred after said solid, radiation-curable resin has been radiation-cured.

56. (New) The process of claim 4 wherein the carrier layer is peelable away from the information to be transferred after said solid, radiation-curable resin has been radiation-cured.

57. (New) The process of claim 54 wherein the carrier layer is polyester material.

58. (New) The process of claim 55 wherein the carrier layer is polyester material.

59. (New) The process of claim 56 wherein the carrier layer is polyester material.

60. (New) The process according to claim 1 wherein the layer comprising the radiation-curable resin of step a)iii, additionally comprises a solid heat-sensitive resin adhesive.
61. (New) The process according to claim 60 wherein the solid heat-sensitive resin adhesive lacks radiation-curable functional groups.
62. (New) The process of claim 61 wherein solid heat-sensitive resin adhesive is a caprolactone-modified phenoxy resin designated as Phenoxy PKCP 67 in Example 2.